

What is claimed is:

1. An ink jet printer comprising:

a recording head for jetting ultraviolet curable ink on a recording medium;

an ultraviolet irradiating device for curing the ink jetted on the recording medium with irradiation of the ultraviolet rays;

a carriage for scanning to form an image on the recording medium, the carriage having the recording head and the ultraviolet irradiating device;

a maintenance unit for performing maintenance on the recording head at a predetermined timing, the maintenance unit having a function switchable between a masking state in which the ultraviolet rays are masked and a non-masking state in which the ultraviolet rays are not masked, the masking state becoming a head maintenance disabling state in which head maintenance is not allowed, and the non-masking state becoming a head maintenance enabling state in which the head maintenance is allowed; and

a control section for controlling the maintenance unit so as to be converted to the masking state which becomes the head maintenance disabling state when an image is formed, and for controlling the maintenance unit so as to be converted to the non-masking state which becomes the head maintenance enabling state after securing a non-irradiating state in which the ultraviolet rays irradiated

from the ultraviolet irradiating device are not irradiated on the maintenance unit, by a function provided by a unit other than the maintenance unit when the head maintenance is performed.

2. The ink jet printer of claim 1, wherein the maintenance unit has a masking blade at a side facing the ultraviolet irradiating device, the masking blade being movable between a masking position in which the ultraviolet rays irradiated from the ultraviolet irradiating device are masked and an evacuating position in which the ultraviolet rays are not masked, and

the control section controls the maintenance unit so as to be converted to the masking state which becomes the head maintenance disabling state when the image is formed, by moving the masking blade to the masking position, and controls the maintenance unit so as to be converted to the non-masking state which becomes the head maintenance enabling state, by moving the masking blade to the evacuating position after securing the non-irradiating state in which the ultraviolet rays irradiated from the ultraviolet irradiating device are not irradiated on the maintenance unit, by the function provided by the unit other than the maintenance unit when the head maintenance is performed.

3. The ink jet printer of claim 1, wherein the maintenance unit is movable between a maintenance region in which the head maintenance is performed within a scanning area of the carriage, and an evacuating region in which the maintenance unit is located outside the scanning area of the carriage so as not to be exposed to the ultraviolet rays irradiated from the ultraviolet irradiating device, and

the control section for controls the maintenance unit so as to be converted to the masking state which becomes the head maintenance disabling state when the image is formed, by moving the maintenance unit to the evacuating region, and controls the maintenance unit so as to be converted to the non-masking state which becomes the head maintenance enabling state, by moving the maintenance unit into the maintenance region after securing the non-irradiating state in which the ultraviolet rays irradiated from the ultraviolet irradiating device are not irradiated on the maintenance unit, by the function provided by the unit other than the maintenance unit when the head maintenance is performed.

4. The ink jet printer of claim 1, wherein the function provided by the unit other than the maintenance unit includes a masking device for switching an irradiating state and the non-irradiating state of the

ultraviolet rays.

5. The ink jet printer of claim 4, wherein the masking device is provided by the ultraviolet irradiating device.

6. The ink jet printer of claim 1, wherein the ultraviolet light source in the ultraviolet irradiating device includes any one of high-pressure mercury lamp, metal halide lamp, hot cathode tube, cold cathode tube, LED, Microwave lamp, excimer lamp, and low-pressure mercury lamp.

7. The ink jet printer of claim 1, wherein the ink jetted from the recording head is cationic curable ink.

What is claimed is:

1. An ink jet printer comprising:

a recording head for jetting ultraviolet curable ink on a recording medium;

an ultraviolet irradiating device for curing the ink jetted on the recording medium with irradiation of the ultraviolet rays;

a carriage for scanning to form an image on the recording medium, the carriage having the recording head and the ultraviolet irradiating device;

a maintenance unit for performing maintenance on the recording head at a predetermined timing, the maintenance unit having a function switchable between a masking state in which the ultraviolet rays are masked and a non-masking state in which the ultraviolet rays are not masked, the masking state becoming a head maintenance disabling state in which head maintenance is not allowed, and the non-masking state becoming a head maintenance enabling state in which the head maintenance is allowed; and

a control section for controlling the maintenance unit so as to be converted to the masking state which becomes the head maintenance disabling state when an image is formed, and for controlling the maintenance unit so as to be converted to the non-masking state which becomes the head maintenance enabling state after securing a non-irradiating state in which the ultraviolet rays irradiated

from the ultraviolet irradiating device are not irradiated on the maintenance unit, by a function provided by a unit other than the maintenance unit when the head maintenance is performed.

2. The ink jet printer of claim 1, wherein the maintenance unit has a masking blade at a side facing the ultraviolet irradiating device, the masking blade being movable between a masking position in which the ultraviolet rays irradiated from the ultraviolet irradiating device are masked and an evacuating position in which the ultraviolet rays are not masked, and

the control section controls the maintenance unit so as to be converted to the masking state which becomes the head maintenance disabling state when the image is formed, by moving the masking blade to the masking position, and controls the maintenance unit so as to be converted to the non-masking state which becomes the head maintenance enabling state, by moving the masking blade to the evacuating position after securing the non-irradiating state in which the ultraviolet rays irradiated from the ultraviolet irradiating device are not irradiated on the maintenance unit, by the function provided by the unit other than the maintenance unit when the head maintenance is performed.

3. The ink jet printer of claim 1 or 2, wherein the maintenance unit is movable between a maintenance region in which the head maintenance is performed within a scanning area of the carriage, and an evacuating region in which the maintenance unit is located outside the scanning area of the carriage so as not to be exposed to the ultraviolet rays irradiated from the ultraviolet irradiating device, and

the control section controls the maintenance unit so as to be converted to the masking state which becomes the head maintenance disabling state when the image is formed, by moving the maintenance unit to the evacuating region, and controls the maintenance unit so as to be converted to the non-masking state which becomes the head maintenance enabling state, by moving the maintenance unit into the maintenance region after securing the non-irradiating state in which the ultraviolet rays irradiated from the ultraviolet irradiating device are not irradiated on the maintenance unit, by the function provided by the unit other than the maintenance unit when the head maintenance is performed.

4. The ink jet printer of any one of claims 1 to 3, wherein the function provided by the unit other than the maintenance unit includes a masking device for switching an irradiating state and the non-irradiating

state of the ultraviolet rays.

5. The ink jet printer of claim 4, wherein the masking device is provided by the ultraviolet irradiating device.

6. The ink jet printer of any one of claims 1 to 5, wherein the ultraviolet light source in the ultraviolet irradiating device includes any one of high-pressure mercury lamp, metal halide lamp, hot cathode tube, cold cathode tube, LED, Microwave lamp, excimer lamp, and low-pressure mercury lamp.

7. The ink jet printer of any one of claims 1 to 6, wherein the ink jetted from the recording head is cationic curable ink.